

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A flexible organic light emitting device comprising:
a flexible substrate,
a lower electrode layer on said flexible substrate,
an upper electrode layer that is at least semi-transparent,
an organic region between said lower electrode layer and said upper electrode layer, in which electroluminescence can take place when a voltage is applied between said lower electrode layer and said upper electrode layer,
wherein said flexible substrate is comprised of one of the following:
a plastic layer laminated to or coated with a metal layer, (ii) a metal layer sandwiched between two plastic layers, and (iii) a metal foil[[;]], and
further wherein at least one of the lower electrode and the upper electrode is a metal electrode having an interfacial modified surface for enhancing charge carrier injection wherein said interfacial modified surface is between said organic region and said metal electrode. wherein said metal layer or said metal foil is disposed such that light generated as a result of said electroluminescence directed towards said metal layer or said metal foil is reflected back to said at least semi-transparent upper electrode layer for enhancing light output from the flexible organic light emitting device.

2. (Currently Amended) The flexible organic light emitting device of claim 1, wherein at least one of said upper and lower electrodes has an interfacial said interfacial modified surface for enhancing charge carrier injection. may be formed by modifying said metal electrode using a TCO.

3. (Currently Amended) The flexible organic light emitting device of claim [[1]] 2, wherein said interfacial modified surface may be formed by modifying said metal electrode the at

least one of the upper or lower electrodes comprises a metal electrode, and wherein the interfacial surface is modified using inorganic or organic materials or a transparent conductive oxide (TCO).

4. (Original) The flexible organic light emitting device of claim 1, wherein said flexible substrate is comprised of a plastic layer laminated to or coated with an aluminum layer, the plastic layer being positioned between the lower electrode layer and the aluminum layer.

5. (Original) The flexible organic light emitting device of claim 1, wherein said flexible substrate is comprised of a steel foil.

6. (Original) The flexible organic light emitting device of claim 1 further comprising an isolation layer between said flexible substrate and said lower electrode layer.

7. (Currently Amended) The flexible organic light emitting device of claim 6[[4]], wherein said isolation layer is a spin-coated polymeric layer or a dielectric layer.

8. (Currently Amended) The flexible organic light emitting device of claim 5 [[3]] further comprising an isolation layer between said steel foil and said lower electrode layer.

9. (Original) The flexible organic light emitting device of claim 1, wherein said upper electrode layer is transparent.

10. (Original) The flexible organic light emitting device of claim 1, wherein said upper electrode layer is a semitransparent or transparent anode.

11. (Original) The flexible organic light emitting device of claim 1, wherein said upper electrode layer is a semitransparent or transparent cathode.

12. (Original) The flexible organic light emitting device of claim 1, wherein said upper electrode layer is a multilayer structure comprising at least one semitransparent or transparent

conductive film.

13. (Currently Amended) The flexible organic light emitting device of claim 12 [[10]], wherein said multilayer structure comprises an index-matching layer of a material having a refractive index chosen such that said light output is further enhanced, and a charge carrier injection layer.

14. (Currently Amended) The flexible organic light emitting device of claim 13 [[11]], wherein said index-matching layer comprises an organic material having a refractive index effective for enhancing light output.

15. (Currently Amended) The flexible organic light emitting device of claim 13 [[11]], wherein said index-matching layer comprises an inorganic material having a refractive index effective for enhancing light output.

16. (Currently Amended) The flexible organic light emitting device of claim 13 [[11]], wherein said multilayer structure is an anode and said charge carrier injection layer is a hole injection layer.

17. (Currently Amended) The flexible organic light emitting device of claim 16 [[14]], wherein said hole injection layer comprises a high work function metal or a transparent conductive oxide (TCO).

18. (Currently Amended) The flexible organic light emitting device of claim 17 [[15]], wherein said high work function metal is gold or silver.

19. (Currently Amended) The flexible organic light emitting device of claim 17 [[15]], wherein said TCO is metal oxide selected from the group consisting of indium-tin-oxide (ITO), zinc-indium-oxide, aluminum-doped zinc oxide, Ga-In-Sn-O, SnO₂, Zn-In-Sn-O, and Ga-In-O.

20. (Cancelled)

21. (Currently Amended) The flexible organic light emitting device of claim 16 [[14]], wherein said hole injection layer comprises an organic material effective for hole injection or an inorganic material effective for hole injection, or a combination of inorganic and organic materials that are effective for hole injection.

22. (Cancelled)

23. (Currently Amended) The flexible organic light emitting device of claim 13 [[11]], wherein said multilayer structure is a cathode and said charge carrier injection layer is an electron injection layer.

24. (Currently Amended) The flexible organic light emitting device of claim 23 [[21]], wherein said electron injection layer comprises a low work function metal.

25. (Currently Amended) The flexible organic light emitting device of claim 24 [[21]], wherein said low work function metal is a rare earth metal and said index-matching layer comprises tris-(8-hydroxyquinoline) aluminum (Alq3) or N,N'-di(naphthalene-1-yl)-N,N'-diphenylbenzidine (NPB).

26. (Cancelled)

27. (Currently Amended) The flexible organic light emitting device of claim 23 [[21]], wherein said cathode comprises a silver layer and said electron injection layer is comprised of a calcium sub-layer over a lithium fluoride sub-layer, the silver layer being formed over the calcium layer.

28. (Previously Presented) The flexible organic light emitting device of claim 1, wherein said organic region comprises a hole transporting layer and an emissive layer and/or an electron transporting layer.

29. (Previously Presented) The flexible organic light emitting device of claim 1, wherein said organic region comprises (i) a hole transporting layer, (ii) an emissive layer, and (iii) an electron transporting layer.